

Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicants reserve the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (currently amended) A method for identifying connection errors in a field device connected to an automation system, comprising:

supplying a signal to the field device via an excitation component, wherein the field device is selected from the group consisting of a sensor and an actuator;

determining a measurement variable assigned to the field device via a measurement component;

analyzing the measurement variable via an analysis unit; and

selecting connection combinations for a plurality of connectors of the field device, at least of a portion of the connectors connected each connected to and a terminal selected from the group consisting of a terminal of the excitation component and a terminal of the measurement component.

18. (currently amended) The method as claimed in claim 17, wherein the connection unit is controlled by a control unit, and wherein each field-device terminal of the automation system is selectively connectable to each terminal of the measurement component or excitation component.

19. (previously presented) The method as claimed in claim 17, further comprises: repeating the process of supplying, determining and selecting, wherein the subsequent selecting uses a different connection combinations.

20. (previously presented) The method as claimed in claim 19, wherein the repetition or the selection of the used terminals depends on the result of the analysis of an earlier measurement.

21. (currently amended) The method as claimed in claim 20, wherein the connection unit is controlled by a control unit, wherein the connection unit is a switch matrix, wherein the control unit and the switch matrix are elements of an integrated circuit.

22. (currently amended) A method for correcting connection errors in a field device connected to an automation system, comprising:  
providing an excitation component that supplies~~for supplying~~ a signal to the field device;  
providing a measurement component that determines~~for determining~~ a measurement variable assigned;  
identifying a connection error; and  
correcting the connection error via a connection unit that selectively connects~~for selective connection of~~ field-device connectors and terminals, each terminal selected from the group consisting of a terminal of the excitation component and a terminal of the measurement component.

23. (previously presented) The method as claimed in claim 22, wherein the connection unit is controlled by a control unit.

24. (previously presented) The method as claimed in claim 22, wherein correction of the connection error includes adapting the connection unit to suit the field-device type.

25. (previously presented) The method as claimed in claim 24, wherein correcting the connection error comprises comparing with a known configuration between the field device and the automation system and appropriate adjustment of the connection unit.

26. (canceled)